

## New record of Spreading Panic-grass *Paspalidium distans* in Victoria: endangered species or NSW expat?

In a recent ecological consultancy survey in Epping, Victoria, a disjunct record of Spreading Panic-grass *Paspalidium distans* (Trin.) Hughes was discovered. This is the first record of this plant in Victoria. It is currently unknown if it is indigenous or introduced to the site.

At first glance, it was thought to be Warrego Summer-grass *Paspalidium jubiflorum* which is widespread on the Murray and Darling River systems and their tributaries. As this appeared to be an unusual sighting for *P. jubiflorum*, a sample specimen was sent to Doug Frood, who is familiar with the flora of the Riverina. He thought it was unusual as it keyed out to *P. jubiflorum* in the Flora of Victoria Vol. II (Walsh and Entwisle 1994) but differed in some of the morphological features and had been collected from an uncharacteristic habitat. So material was sent on to the National Herbarium of Victoria to determine the identification. The plant was positively identified and vouchered by Neville Walsh at the National Herbarium of Victoria as *P. distans*, which has not previously been recorded in Victoria. *P. distans* differs from *P. jubiflorum* in that it is a smaller plant with smaller spikelets and fewer spikelets on each branch of the inflorescence (Neville Walsh pers. comm.).

*P. distans* is a tufted perennial grass that grows to 0.7 m high (National Herbarium of New South Wales 2008). See front cover for close-up of inflorescence. The distribution of *P. distans* in Australia is known from records at herbaria in NSW, Queensland, Northern Territory and Western Australia, with the closest records in mid-southern NSW (Centre for Plant Biodiversity Research 2008). In NSW, *P. distans* grows in woodland and scrub on poor soils (National Herbarium of New South Wales 2008).

The site where the specimen was found is gently undulating terrain with a slightly northerly aspect, 157 m above sea level. The site is approximately 17 km north-east of Melbourne Airport and had mean annual rainfall of 536 mm, between 1970 and 2008 (Bureau of Meteorol-

ogy 2008). On 21 April 2008, approximately 20 plants were found on a small stony rise, broadly classified as Ecological Vegetation Class (55\_61) Plains Grassy Woodland, which is endangered in the Victorian Volcanic Plain bioregion (DSE 2008). The overstorey is dominated by scattered large, old River Red-gums *Eucalyptus camaldulensis* with middle storey plant life-forms virtually absent. A number of indigenous herb and grass species occupy the understorey, being mostly species resilient to grazing pressure. A suite of environmental weed species is also abundant within the ground-storey. See Table 1 for 10 x 10 m<sup>2</sup> quadrat record. The vegetation is considered to be highly modified from its pre-European condition, as it has been used for agriculture for a number of decades. However, the area has not been ploughed and maintains stony rise vegetation and large trees, indicating the potential for long-term viability.

The geology of much of the area where the plants were found comprises Olivine basalt of Newer Volcanics (Pliocene) formation (Geological Survey of Victoria 1972). Soils are friable brown basaltic clays, which occur on the exposed stony rises.

As this is a disjunct record, the National Herbarium of Victoria considers the specimen to have an interim origin status as uncertain (Neville Walsh pers. comm.). If it is native, it is extraordinarily rare, but there is also a possibility that it has been introduced to the site (e.g. via hay, stockfeed). Some other collections of *Paspalidium* species in Victoria (e.g. *P. jubiflorum*) are thought to represent plants arising inadvertently from transported seed (Walsh and Entwisle 1994).

The Victorian threat status should be 'poorly known' (k), in the interim, but if it is found to be native, the conservation status would likely be assessed as endangered (e) in Victoria, using the Victorian Rare or Threatened (VROT) criteria in DSE (2005) (Doug Frood pers. comm.).

Table 1. Quadrat record of floristic habitat of Spreading Panic-grass at Epping, Victoria. Recs 18, Date: 21 April 2008, Location: 145°02'23" 37°37'35", Altitude: 157 m, Collector : NMcCaffrey, Vegetation: VVP\_0055\_6. \* = introduced species; k = poorly known threat status.

E01923		Quadrat 1	
1	2966	* <i>Acetosella vulgaris</i>	Sheep Sorrel
1	977	<i>Austrodanthonia racemosa</i> var. <i>racemosa</i>	Stiped Wallaby-grass
2	3291	<i>Austrostipa semibarata</i>	Fibrous Spear-grass
1	341	* <i>Avena fatua</i>	Wild Oat
1	748	<i>Chenopodium pumilio</i>	Clammy Goosefoot
1	912	* <i>Cynosurus echinatus</i>	Rough Dog's-tail
1	1690	* <i>Hirschfeldia incana</i>	Buchan Weed
+	1692	* <i>Holcus lanatus</i>	Yorkshire Fog
+	1747	* <i>Hypochoeris glabra</i>	Smooth Cat's-ear
1	1748	* <i>Hypochoeris radicata</i>	Cat's Ear
1	2036	* <i>Lolium perenne</i>	Perennial Rye-grass
2	2179	<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping Grass
1	2213	* <i>Modiola caroliniana</i>	Red-flower Mallow
1	n/a	?k <i>Paspalidium distans</i>	Spreading Panic-grass
2	2561	* <i>Plantago lanceolata</i>	Ribwort
1	2942	* <i>Romulea rosea</i>	Onion Grass
+	2950	* <i>Rosa rubiginosa</i>	Sweet Briar
+	3133	* <i>Setaria parviflora</i>	Slender Pigeon Grass

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## References

- Bureau of Meteorology (2008) *Climate statistics for Australian locations: Monthly climate statistics – Summary statistics for Melbourne Airport*. <[http://www.bom.gov.au/climate/averages/tables/cw\\_086282.shtml](http://www.bom.gov.au/climate/averages/tables/cw_086282.shtml)>
- Centre for Plant Biodiversity Research (2008) *Australia's Virtual Herbarium*, [map output], via Centre for Plant Biodiversity Research, Council of Heads of Australian Herbaria. Viewed 17 July 2008, <<http://www.cpbr.gov.au/cgi-bin/avh.cgi>>
- DSE (2005) *Advisory List of Rare or Threatened Plants in Victoria*. Department of Sustainability and Environment, Melbourne, Victoria. <<http://www.dse.vic.gov.au/dse/nrence.nsf/>>
- DSE (2008) *Ecological Vegetation Classes (EVC) – Benchmarks by Bioregion*. Department of Sustainability and Environment, Melbourne, Victoria. Viewed 5 July 2008. <<http://www.dse.vic.gov.au/dse/nrence.nsf/>>
- Geological Survey of Victoria (1972) *Yan Yean Mapsheet 7922 (1:63,360)*. Geological Survey of Victoria.
- National Herbarium of New South Wales (2008) *New South Wales Flora Online*. Royal Botanic Gardens and Domain Trust, Sydney Australia. Viewed 5 July 2008. <<http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Paspalidium~distans>>
- Walsh NG and Entwistle T (ed) (1994) *Flora of Victoria*. Vol 2. (National Herbarium of Victoria, Royal Botanic Gardens: Melbourne)

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